

Separating elective and emergency streams - the benefit of centralisation of our maternity services at Aneurin Bevan University Health Board (ABUHB)

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Introduction

Previously Royal Gwent (RGH) and Nevill Hall (NHH) hospitals performed elective caesarean sections (EILSCS) on three days a week, but with no dedicated staff or theatre space as recommended[1]. In this situation, emergency patients will clearly always take priority over elective patients. This leads to a high chance that elective patients may have to wait long times and potentially be cancelled and moved to the next day. In November 2020, the Grange University Hospital (GUH) opened and the model for maternity services in ABUHB changed from two consultant led units (CLU) and four midwifery led units (MLU) to one CLU and five MLUs. As part of this process, we separated our streams, moving the EILSCS away from labour ward to a dedicated five day a week theatre in the main suite. We wanted to review the effect this has had on our service provision.

Methods

A 20-week period since opening was compared to a historical 30-week period (2016) that had been used in service modelling. Primary data reviewed was delay to first EILSCS, EILSCS length, turnaround time and cancellations. Data was retrospectively retrieved from our Operating Room Management Information System (ORMIS). Patient feedback from next day follow up was also reviewed from our anaesthetic maternity database.

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Discussion

As might be expected, a dedicated EILSCS list has led to reduced delays to first case and improved turnaround. Cancellation data was more difficult to assess, historical practice was to transfer cases rather than cancel on ORMIS. Subjectively there were frequent cancellations with the third LSCS of the day having approximately a 50% cancellation rate. 2021 data showed only three on the day cancellations, two being for bed reasons. Other cancellations occurred well before the day and demonstrates the ability the unit has to manage the elective lists efficiently. Separating our emergency and elective streams has had significant benefits for our patients with minimal cancellations and much improved efficiency of the elective service. The environment is also more relaxed and allows us to ensure all our family friendly caesarean practices can happen. This is all reflected in positive patient feedback from the following day follow up which has unanimously been excellent. We plan to regularly reaudit data to ensure the service is maintained

References

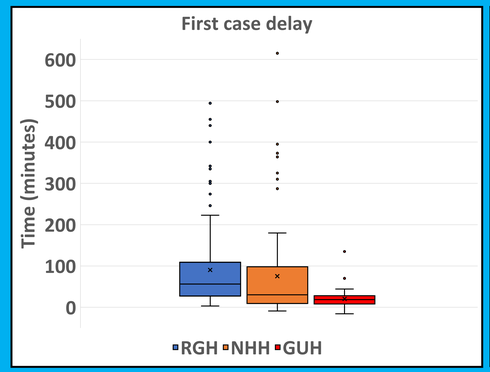
1. RCoA; Chapter 9: Guidelines for the provision of anaesthesia services for an Obstetric population; 2020; **https://rcoa.ac.uk/gpas/chapter-9**

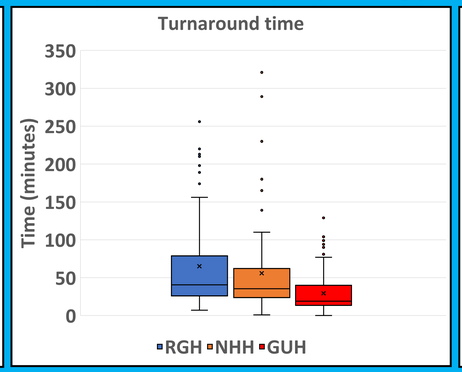
Results

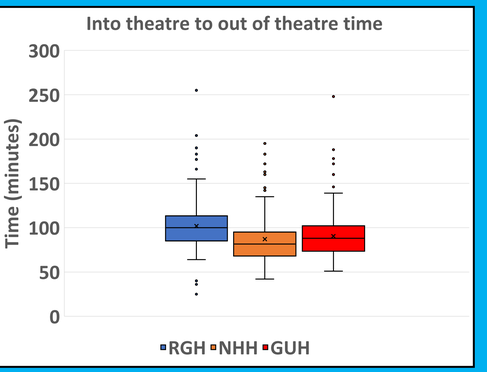
371 EILSCS from the 2016 period were compared with 284 from the 2020-21 period. Cancellation data from the 2016 period was not captured on ORMIS but 2021 was.

	Category 4 LSCS (average number/week)	In theatre to out of theatre time	Turnaround	First case delay	On the day cancellations (number)
RGH (2016)	7.93	100 [85-113]	40 [26-78]	56 [27-109]	--*
NHH (2016)	5.06	81 [68-95]	36 [24-62]	30 [9-98]	--*
GUH (2020-2021)	14.2	88 [74-102]	19 [14-40]	19 [8-28]	3

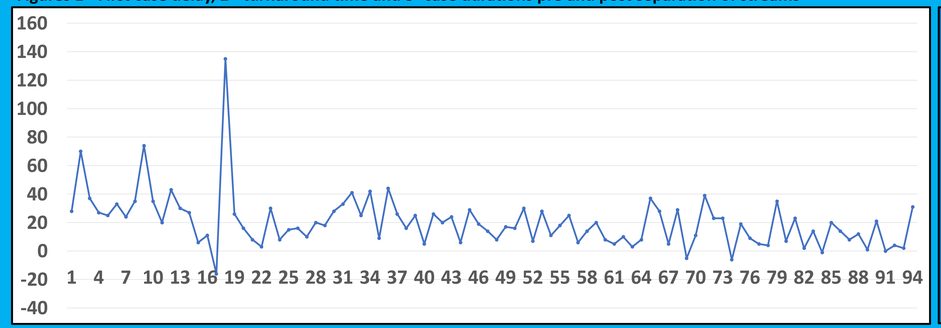
Table 1 - Case, turnaround and first case delay durations. (Data is minutes presented as Median + [Interquartile range] unless otherwise stated. (*Data not recorded on system))







Figures 1 - First case delay, 2 - turnaround time and 3- case durations pre and post separation of streams



Figures 4 – First case delay from start of service to end of review period.

2021 Cancellations

On the day (1 list overrun, 2 no beds)	3
Already delivered	42
Moved by hospital before date	13
Cephalic	1
Declined	1
Not rquired	2
Booking error	2
Unclear	6

Figure 5 – 2021 ORMIS cancellation data